

Notice of Allowability

Application No.

10/005,615

Examiner

Leigh Marie Garbowski

Applicant(s)

CHANG ET AL.

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☐ This communication is responsive to _____.
2. ☒ The allowed claim(s) is/are 1-44.
3. ☒ The drawings filed on 07 November 2001 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date (8 sheets) 8/30/02 aw 1/21/03
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☒ Interview Summary (PTO-413),
Paper No./Mail Date (attached) .
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

Election/Restrictions

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1-44, drawn to using/generating optical models and making a decision, classified in class 716, subclass 4.
- II. Claims 45-48, drawn to deciding to use a stepper with a particular mask, classified in class 716, subclass 21.
- III. Claims 49-50, drawn to a file, classified in class 716, subclass 19.

The inventions are distinct, each from the other because of the following reasons:

Inventions II and I-III are related as combination and subcombination. Inventions in this relationship are distinct if it can be shown that (1) the combination as claimed does not require the particulars of the subcombination as claimed for patentability, and (2) that the subcombination has utility by itself or in other combinations (MPEP § 806.05(c)). In the instant case, the combination of invention II as claimed does not require the particulars of the subcombination of invention I or invention III as claimed. The subcombination of invention I has separate utility such as for generating optical models and making a decision without lens aberration information or wherein lens aberration information is difficult to extract. The subcombination of invention III has separate utility such as for a file located on a disc or equivalent memory device.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper.

During a telephone conversation with Jeanette S. Harms on 12/07/2004 a provisional election was made without traverse to prosecute the invention of Group I, claims 1-44. Claims 45-50 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

This application is in condition for allowance except for the presence of claims 45 to 50 non-elected without traverse. Accordingly, claims 45-50 have been cancelled below.

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Jeanette S. Harms on 12/07/2004.

The application has been amended as follows:

CLAIM 13

--regarding the stepper process-- was inserted after "decision" [line 7].

CLAIMS 45-50 were cancelled.

Allowable Subject Matter

Claims 1-44 are allowed.

The following is an examiner's statement of reasons for allowance: the prior art of record does not disclose or teach, as per claim 1, a process to assist a second party in making a decision regarding the use of a stepper, the process including the first party allowing the second party access to the optical models, but not the lens aberration information, wherein the second party in performing a function with the optical models provides an output that facilitates the decision, particularly in combination with the previously recited steps; as per claim 13, a method of evaluating a stepper process, wherein lens aberration affects the stepper process, the method comprising receiving, from a facilitator responding to a request, a set of optical models including lens aberration information, wherein the lens aberration information is difficult to extract from the optical models, and using the set of optical models to a make a decision regarding the stepper process; as per claim 29, a method of a facilitator providing lens aberration information regarding a stepper to a user, the method comprising: generating optical models using the lens aberration information, wherein the lens aberration information is

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difficult to extract from the optical models, and providing the optical models to the user, particularly in combination with the previously recited step; as per claim 43, a product of a mask used with a stepper by the process similarly described with respect to claim 13; and as per claim 44, a product of an integrated circuit produced using a stepper by the process similarly described with respect to claim 13.

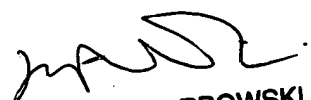
Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Oshelski et al. [U.S. Patents #5,586,059 and #5,757,673] disclose a data management system for analysis and control of steppers. Pang et al. [U.S. Patent #6,578,188 B1] disclose a network-based simulation server.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leigh Marie Garbowski whose telephone number is 571-272-1893. The examiner can normally be reached on days.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew Smith can be reached on 571-272-1907. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


LEIGH M. GARBOWSKI
PRIMARY EXAMINER